## **AMENDMENTS TO THE CLAIMS**

This listing of claims will replace all prior versions, and listings, of claims in the application:

(Currently Amended) A method of combating and controlling insects, acarines, nematodes
or molluscs which comprises applying to a pest, to a locus of a pest, or to a plant
susceptible to attack by a pest an insecticidally, acaricidally, nematicidally or molluscicidally
effective amount of a compound of formula I[[.]]

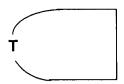
$$(CRa_2)p$$
 $(CRa_2)q$ 
 $R^2$ 
 $R^3$ 
 $(R_4)n$ 
 $(I)$ 

wherein Y is a single bond, C=O, C=S or S(O)<sub>m</sub> where m is 0, 1 or 2;

R¹ is hydrogen, optionally substituted alkyl, optionally substituted alkoxycarbonyl, optionally substituted alkylcarbonyl, aminocarbonyl, optionally substituted alkylaminocarbonyl, optionally substituted aryl, optionally substituted heteroaryl, optionally substituted alkoxy, optionally substituted aryloxy, optionally substituted heteroaryloxy, optionally substituted heterocyclyloxy, cyano, optionally substituted alkenyl, optionally substituted alkynyl, optionally substituted cycloalkyl, optionally substituted cycloalkenyl, formyl, optionally substituted heterocyclyl, optionally substituted alkylthio, NO or NR¹³R¹⁴ where R¹³ and R¹⁴ are independently hydrogen, COR¹⁵, optionally substituted alkyl, optionally substituted heterocyclyl or R¹³ and R¹⁴ together with the N atom to which they are attached form a group -N=C(R¹⁶)-NR¹¹R¹³; R¹⁵ is H, optionally substituted alkyl, optionally substituted heteroaryl, optionally substituted heteroaryl, optionally substituted heteroaryl, optionally substituted heteroaryl, optionally substituted heteroaryl,

optionally substituted heteroaryloxy or NR<sup>19</sup>R<sup>20</sup>; R<sup>16</sup>, R<sup>17</sup> and R<sup>18</sup> are each independently H or lower alkyl; R<sup>19</sup> and R<sup>20</sup> are independently optionally substituted alkyl, optionally substituted aryl or optionally substituted heteroaryl;

R<sup>2</sup> and R<sup>3</sup> are independently hydrogen, halogen, cyano, optionally substituted alkyl, optionally substituted alkoxy or optionally substituted aryl; the ring



T<sub>2</sub> T<sub>1</sub> T<sub>2</sub> T<sub>3</sub> T<sub>4</sub> T<sub>4</sub>

is a [[5 or ]]6 membered heteroaromatic ring.

<u>, wherein T1 represents N, and</u>

each of T2, T3, and T4 represent C;

each  $R^4$  is independently halogen, nitro, cyano, optionally substituted  $C_{1-8}$  alkyl, optionally substituted  $C_{2-6}$  alkenyl, optionally substituted  $C_{2-6}$  alkynyl, optionally substituted alkoxycarbonyl, optionally substituted alkylcarbonyl, optionally substituted alkylaminocarbonyl, optionally substituted  $C_{3-7}$  cycloalkyl, optionally substituted aryl, optionally substituted heteroaryl, optionally substituted heterocyclyl, optionally substituted alkoxy, optionally substituted aryloxy, optionally substituted heterocyclyl, optionally substituted alkylthio or  $R^{21}R^{22}N$  where  $R^{21}$  and  $R^{22}$  are, independently, hydrogen,  $C_{1-8}$  alkyl,  $C_{3-7}$  cycloalkyl,  $C_{3-6}$  alkenyl,  $C_{3-6}$  alkenyl,  $C_{3-6}$  alkoxycarbonyl or  $R^{21}$  and  $R^{22}$  together with the N atom to which they are attached form a five, six or seven-membered heterocyclic ring which may contain one or two further heteroatoms selected from O, N or S and which may be optionally substituted by one or two  $C_{1-6}$  alkyl groups, or 2 adjacent groups  $R^4$  together with the carbon atoms to which they are attached form a 4, 5, 6,or 7 membered carbocyclic or heterocyclic ring which may be optionally substituted by halogen; n is 0, 1, 2 or 3;

each Ra is independently hydrogen, halogen, hydroxy, cyano, optionally substituted  $C_{1-8}$  alkyl, optionally substituted  $C_{2-6}$  alkenyl, optionally substituted  $C_{2-6}$  alkynyl, optionally substituted alkylcarbonyl, optionally substituted

alkylaminocarbonyl, optionally substituted dialkylaminocarbonyl, optionally substituted C<sub>3-7</sub> cycloalkyl, optionally substituted aryl, optionally substituted heteroaryl, optionally substituted heterocyclyl, optionally substituted alkoxy, optionally substituted aryloxy, optionally substituted heteroaryloxy, optionally substituted alkylthio, optionally substituted arylthio or R<sup>23</sup>R<sup>24</sup>N where R<sup>23</sup> and R<sup>24</sup> are, independently, hydrogen, C<sub>1-8</sub> alkyl, C<sub>3-7</sub> cycloalkyl, C<sub>3-6</sub> alkenyl,  $C_{3-6}$  alkynyl,  $C_{3-7}$  cycloalkyl( $C_{1-4}$ )alkyl,  $C_{2-6}$  haloalkyl,  $C_{1-6}$  alkoxy( $C_{1-6}$ )alkyl,  $C_{1-6}$ alkoxycarbonyl or R<sup>23</sup> and R<sup>24</sup> together with the N atom to which they are attached form a five, six or seven-membered heterocyclic ring which may contain one or two further heteroatoms selected from O, N or S and which may be optionally substituted by one or two C<sub>1.6</sub> alkyl groups, or two Ra groups attached to the same carbon atom are =O or two Ra groups attached to adjacent carbon atoms form a bond, or two Ra groups together with the carbon atom to which they are attached form a three- to seven-membered ring, that may be saturated or unsaturated, and that may contain one or two hetero atoms selected from the group consisting of N, O and S, and which may be optionally substituted by one or two C<sub>1-6</sub> alkyl groups; or two Ra groups together form a group -CH<sub>2</sub>-, -CH=CH- or -CH<sub>2</sub>CH<sub>2</sub>; p is 0, 1, 2, 3, 4, 5 or 6; q is 0, 1, 2, 3, 4, 5 or 6 provided that p+q is 1, 2, 3, 4, 5 or 6; R<sup>8</sup> is optionally substituted alkyl, optionally substituted alkenyl, optionally substituted alkynyl, optionally substituted cycloalkyl, optionally substituted aryl, optionally substituted alkoxy, optionally substituted aryloxy, optionally substituted alkoxycarbonyl, optionally substituted alkylcarbonyl or optionally substituted alkenylcarbonyl; or salts or N-oxides thereof.

- 2. (Canceled).
- 3. (Previously Presented) A method according to claim 1 wherein Y is a single bond or C=O.
- 4. (Previously Presented) A method according to claim 1 wherein R<sup>2</sup> and R<sup>3</sup> are each independently hydrogen, C<sub>1-6</sub> alkyl, C<sub>1-6</sub> haloalkyl, C<sub>1-6</sub> alkoxy or cyano.
- (Previously Presented) A method according to claim 1 wherein R¹ is hydrogen, C₁-6 alkyl, C₁-6 cyanoalkyl, C₁-6 haloalkyl, C₃-7 cycloalkyl(C₁-4)alkyl, C₁-6 alkoxy(C₁-6)alkyl, heteroaryl(C₁-6)alkyl (wherein the heteroaryl group may be optionally substituted by halo, nitro, cyano, C₁-6 alkyl, C₁-6 haloalkyl, C₁-6 alkoxy, C₁-6 haloalkoxy, C₁-6 alkylsulfonyl, C₁-6 alkylsulfinyl, C₁-6 alkylsulfonyl, C₁-6 alkylcarbonyl, c₁-6 alkylcarbonyl, or two adjacent

positions on the heteroaryl system may be cyclised to form a 5, 6 or 7 membered carbocyclic or heterocyclic ring, itself optionally substituted with halogen), aryl(C<sub>1-6</sub>)alkyl (wherein the aryl group may be optionally substituted by halo, nitro, cyano, C<sub>1-6</sub> alkyl, C<sub>1-6</sub> haloalkyl, C<sub>1-6</sub> alkoxy, C<sub>1-6</sub> haloalkoxy, C<sub>1-6</sub> alkylsulfonyl, C<sub>1-6</sub> alkylsulfinyl, C<sub>1-6</sub> alkylthio, C<sub>1-6</sub> alkoxycarbonyl, C<sub>1-6</sub> alkylcarbonylamino, arylcarbonyl, or two adjacent positions on the aryl system may be cyclised to form a 5, 6 or 7 membered carbocyclic or heterocyclic ring, itself optionally substituted with halogen), C<sub>1-6</sub> alkylcarbonylamino(C<sub>1-6</sub>)alkyl, aryl (which may be optionally substituted by halo, nitro, cyano, C<sub>1-6</sub> alkyl, C<sub>1-6</sub> haloalkyl, C<sub>1-6</sub> alkoxy, C<sub>1-6</sub> haloalkoxy, C<sub>1-6</sub> alkylsulfonyl, C<sub>1-6</sub> alkylsulfinyl, C<sub>1-6</sub> alkylthio, C<sub>1-6</sub> alkoxycarbonyl, C<sub>1-6</sub> alkylcarbonylamino, arylcarbonyl, or two adjacent positions on the aryl system may be cyclised to form a 5, 6 or 7 membered carbocyclic or heterocyclic ring, itself optionally substituted with halogen), heteroaryl (which may be optionally substituted by halo, nitro, cyano, C<sub>1-6</sub> alkyl, C<sub>1-6</sub> haloalkyl, C<sub>1-6</sub> alkoxy, C<sub>1-6</sub> haloalkoxy, C<sub>1-6</sub> alkylsulfonyl, C<sub>1-6</sub> alkylsulfinyl, C<sub>1-6</sub> alkylthio, C<sub>1-6</sub> alkoxycarbonyl, C<sub>1-6</sub> alkylcarbonylamino, arylcarbonyl, or two adjacent positions on the heteroaryl system may be cyclised to form a 5, 6 or 7 membered carbocyclic or heterocyclic ring, itself optionally substituted with halogen), C<sub>1-6</sub> alkoxy, C<sub>1-6</sub> haloalkoxy, phenoxy (wherein the phenyl group is optionally substituted by halogen, C<sub>1-4</sub> alkyl, C<sub>1-4</sub> alkoxy, C<sub>1-4</sub> haloalkyl, C<sub>1-4</sub> haloalkoxy, CN, NO<sub>2</sub>, aryl, heteroaryl, amino or dialkylamino), heteroaryloxy (optionally substituted by halo, nitro, cyano, C<sub>1-6</sub> alkyl, C<sub>1-6</sub> haloalkyl, C<sub>1-6</sub> alkoxy or C<sub>1-6</sub> haloalkoxy), heterocyclyloxy (optionally substituted by halo, C<sub>1-6</sub> alkyl, C<sub>1-6</sub> haloalkyl, C<sub>1-6</sub> alkoxy or C<sub>1-6</sub> haloalkoxy), cyano, C<sub>2-6</sub> alkenyl, C<sub>2-6</sub> alkynyl, C<sub>3-6</sub> cycloalkyl, C<sub>5-7</sub> cycloalkenyl, heterocyclyl (optionally substituted by halo, nitro, cyano, C<sub>1-6</sub> alkyl, C<sub>1-6</sub> haloalkyl, C<sub>1-6</sub> alkoxy or C<sub>1-6</sub> haloalkoxy), C<sub>1-6</sub> alkylthio, C<sub>1-6</sub> haloalkylthio or NR<sup>13</sup>R<sup>14</sup> where R<sup>13</sup> and R<sup>14</sup> are independently hydrogen, C<sub>1-6</sub> alkyl, C<sub>1-6</sub> haloalkyl, C<sub>1-6</sub> alkoxy(C<sub>1-6</sub>)alkyl, phenyl (which may be optionally substituted by halogen, C<sub>1-4</sub> alkyl, C<sub>1-4</sub> alkoxy, C<sub>1-4</sub> haloalkyl, C<sub>1-4</sub> haloalkoxy, CN, NO<sub>2</sub>, aryl, heteroaryl, amino, dialkylamino or C<sub>1-4</sub> alkoxycarbonyl), phenyl (C<sub>1-6</sub>)alkyl (wherein the phenyl group may be optionally substituted by halogen,  $C_{1-4}$  alkyl,  $C_{1-4}$  alkoxy,  $C_{1-4}$  haloalkyl,  $C_{1-4}$  haloalkoxy, CN, NO<sub>2</sub>, aryl, heteroaryl, amino, dialkylamino, C<sub>1-6</sub> alkylsulfonyl, C<sub>1-6</sub> alkoxycarbonyl, or two adjacent positions on the phenyl ring may be cyclised to form a 5, 6 or 7 membered carbocyclic or heterocyclic ring. itself optionally substituted with halogen), heteroaryl (C<sub>1-6</sub>)alkyl (wherein the heteroaryl group may be optionally substituted by halo, nitro, cyano, C<sub>1-6</sub> alkyl, C<sub>1-6</sub> haloalkyl, C<sub>1-6</sub> alkoxy, C<sub>1-6</sub> haloalkoxy, C<sub>1-6</sub> alkylsulfonyl, C<sub>1-6</sub> alkylsulfinyl, C<sub>1-6</sub> alkylthio, C<sub>1-6</sub>

alkoxycarbonyl, C<sub>1-6</sub> alkylcarbonylamino, arylcarbonyl, or two adjacent positions on the heteroaryl system may be cyclised to form a 5, 6 or 7 membered carbocyclic or heterocyclic ring, itself optionally substituted with halogen) or heteroaryl (which may be optionally substituted by halo, nitro, cyano, C<sub>1-6</sub> alkyl, C<sub>1-6</sub> haloalkyl, C<sub>1-6</sub> alkoxy or C<sub>1-6</sub> haloalkoxy, C<sub>1-4</sub> alkoxycarbonyl C<sub>1-6</sub> alkylcarbonylamino, phenyloxycarbonylamino (wherein the phenyl group is optionally substituted by halogen, C<sub>1-4</sub> alkyl, C<sub>1-4</sub> alkoxy, C<sub>1-4</sub> haloalkyl, C<sub>1-4</sub> haloalkoxy, CN, NO<sub>2</sub>, aryl, heteroaryl, amino or dialkylamino), amino, C<sub>1-6</sub> alkylamino or phenylamino (wherein the phenyl group is optionally substituted halogen, C<sub>1-4</sub> alkyl, C<sub>1-4</sub> alkoxy, C<sub>1-4</sub> haloalkyl, C<sub>1-4</sub> haloalkoxy, CN, NO<sub>2</sub>, aryl, heteroaryl, amino or dialkylamino)).

6. (Previously Presented) A method according to claim 1 wherein each R<sup>4</sup> is independently halogen, cyano, C<sub>1-8</sub> alkyl, C<sub>1-8</sub> haloalkyl, C<sub>1-6</sub> cyanoalkyl, C<sub>1-6</sub> alkoxy(C<sub>1-6</sub>)alkyl, C<sub>3-7</sub> cycloalkyl( $C_{1-6}$ )alkyl,  $C_{5-6}$  cycloalkenyl( $C_{1-6}$ )alkyl,  $C_{3-6}$  alkenyloxy( $C_{1-6}$ )alkyl,  $C_{3-6}$ alkynyloxy( $C_{1-6}$ )alkyl, aryloxy( $C_{1-6}$ )alkyl,  $C_{1-6}$  carboxyalkyl,  $C_{1-6}$  alkylcarbonyl( $C_{1-6}$ )alkyl,  $C_{2-6}$ alkenylcarbonyl( $C_{1-6}$ )alkyl,  $C_{2-6}$  alkynylcarbonyl( $C_{1-6}$ )-alkyl,  $C_{1-6}$  alkoxycarbonyl( $C_{1-6}$ )alkyl,  $C_{3-6}$ alkenyloxycarbonyl( $C_{1-6}$ )alkyl,  $C_{3-6}$  alkynyloxycarbonyl( $C_{1-6}$ )alkyl, aryloxycarbonyl( $C_{1-6}$ )alkyl,  $C_{1-6}$  alkylthio( $C_{1-6}$ )alkyl,  $C_{1-6}$  alkylsulfinyl( $C_{1-6}$ )alkyl,  $C_{1-6}$  alkylsulfonyl( $C_{1-6}$ )alkyl, aminocarbonyl( $C_{1-6}$ )alkyl,  $C_{1-6}$  alkylaminocarbonyl( $C_{1-6}$ )alkyl, di( $C_{1-6}$ )alkylaminocarbonyl( $C_{1-6}$ ) <sub>6</sub>)alkyl, phenyl(C<sub>1-4</sub>)alkyl (wherein the phenyl group is optionally substituted by halogen, C<sub>1-4</sub> alkyl, C<sub>1-4</sub> alkoxy, C<sub>1-4</sub> haloalkyl, C<sub>1-4</sub> haloalkoxy, CN, NO<sub>2</sub>, aryl, heteroaryl, amino or dialkylamino), heteroaryl(C<sub>1-4</sub>)alkyl (wherein the heteroaryl group is optionally substituted by halo, nitro, cyano, C<sub>1-6</sub> alkyl, C<sub>1-6</sub> haloalkyl, C<sub>1-6</sub> alkoxy or C<sub>1-6</sub> haloalkoxy), heterocyclyl(C<sub>1-</sub> <sub>4</sub>)alkyl (wherein the heterocyclyl group is optionally substituted by halo, nitro, cyano, C<sub>1-6</sub> alkyl,  $C_{1-6}$  haloalkyl,  $C_{1-6}$  alkoxy or  $C_{1-6}$  haloalkoxy),  $C_{2-6}$  alkenyl, aminocarbonyl( $C_{2-6}$ )alkenyl,  $C_{1-6}$  alkylaminocarbonyl( $C_{2-6}$ )alkenyl, di( $C_{1-6}$ )alkylaminocarbonyl( $C_{2-6}$ )alkenyl, phenyl( $C_{2-4}$ )alkenyl, (wherein the phenyl group is optionally substituted by halogen, C<sub>1-4</sub> alkyl, C<sub>1-4</sub> alkoxy, C<sub>1-4</sub> haloalkyl, C<sub>1-4</sub> haloalkoxy, CN, NO<sub>2</sub>, aryl, heteroaryl, amino or dialkylamino), C<sub>2-</sub>  $_{6}$  alkynyl, trimethylsilyl( $C_{2-6}$ )alkynyl, aminocarbonyl( $C_{2-6}$ )alkynyl,  $C_{1-6}$  alkylaminocarbonyl( $C_{2-6}$ ) <sub>6</sub>)alkynyl, di(C<sub>1-6</sub>)alkylaminocarbonyl(C<sub>2-6</sub>)alkynyl, C<sub>1-6</sub> alkoxycarbonyl, C<sub>3-7</sub> cycloalkyl, C<sub>3-7</sub> halocycloalkyl, C<sub>3-7</sub> cyanocycloalkyl, C<sub>1-3</sub> alkyl(C<sub>3-7</sub>)-cycloalkyl, C<sub>1-3</sub> alkyl(C<sub>3-</sub> 7)halocycloalkyl,phenyl (optionally substituted by halogen, C<sub>1-4</sub> alkyl, C<sub>1-4</sub> alkoxy, C<sub>1-4</sub> haloalkyl, C<sub>1-4</sub> haloalkoxy, CN, NO<sub>2</sub>, aryl, heteroaryl, amino or dialkylamino), heteroaryl (optionally substituted by halo, nitro, cyano, C<sub>1-6</sub> alkyl, C<sub>1-6</sub> haloalkyl, C<sub>1-6</sub> alkoxy or C<sub>1-6</sub>

haloalkoxy), heterocyclyl (wherein the heterocyclyl group is optionally substituted by halo, nitro, cyano, C<sub>1-6</sub> alkyl, C<sub>1-6</sub> haloalkyl, C<sub>1-6</sub> alkoxy or C<sub>1-6</sub> haloalkoxy), or 2 adjacent groups R<sup>4</sup> together with the carbon atoms to which they are attached form a 4, 5, 6 or 7 membered carbocylic or heterocyclic ring which may be optionally substituted by halogen, C<sub>1-8</sub> alkoxy, C<sub>1-6</sub> haloalkoxy, phenoxy (optionally substituted by halo, nitro, cyano, C<sub>1-6</sub> alkyl, C<sub>1-6</sub> haloalkyl, C<sub>1-6</sub> haloalkoxy), heteroaryloxy (optionally substituted by halo, nitro, cyano, C<sub>1-8</sub> alkyl, C<sub>1-6</sub> haloalkyl, C<sub>1-6</sub> alkoxy or C<sub>1-6</sub> haloalkoxy), C<sub>1-8</sub> alkylthio or R<sup>19</sup>R<sup>20</sup>N where R<sup>19</sup> and R<sup>20</sup> are, independently, hydrogen, C<sub>1-8</sub> alkyl, C<sub>3-7</sub> cycloalkyl, C<sub>3-6</sub> alkenyl, C<sub>3-6</sub> alkynyl, C<sub>2-6</sub> haloalkyl, C<sub>1-6</sub> alkoxycarbonyl or R<sup>19</sup> and R<sup>20</sup> together with the N atom to which they are attached form a five, six or seven-membered heterocyclic ring which may contain one or two further heteroatoms selected from O, N or S and which may be optionally substituted by one or two C<sub>1-6</sub> alkyl groups; and n is 0, 1, 2 or 3.

(Previously Presented) A method according to claim 1 wherein R<sup>8</sup> is C<sub>1-10</sub> alkyl, C<sub>1-10</sub> 7. haloalkyl, aryl(C<sub>1-6</sub>)alkyl (wherein the aryl group is optionally substituted by halogen, C<sub>1-4</sub> alkyl, C<sub>1.4</sub> alkoxy, C<sub>1.4</sub> haloalkyl, C<sub>1.4</sub> haloalkoxy, CN, NO<sub>2</sub>, aryl, heteroaryl, amino or dialkylamino), heteroaryl(C<sub>1.6</sub>)alkyl (wherein the heteroaryl group is optionally substituted by halogen, C<sub>1-4</sub> alkyl, C<sub>1-4</sub> alkoxy, C<sub>1-4</sub> haloalkyl, C<sub>1-4</sub> haloalkoxy, CN, NO<sub>2</sub>, aryl, heteroaryl, amino or dialkylamino), arylcarbonyl-(C<sub>1-6</sub>)alkyl (wherein the aryl group may be optionally substituted by halogen, C<sub>1-4</sub> alkyl, C<sub>1-4</sub> alkoxy, C<sub>1-4</sub> haloalkyl, C<sub>1-4</sub> haloalkoxy, CN, NO<sub>2</sub>, aryl, heteroaryl, amino or dialkylamino and the alkyl group may be optionally substituted by aryl),  $C_{2-8}$  alkenyl,  $C_{2-8}$  haloalkenyl, aryl( $C_{2-6}$ )-alkenyl (wherein the aryl group is optionally substituted halogen, C<sub>1-4</sub> alkyl, C<sub>1-4</sub> alkoxy, C<sub>1-4</sub> haloalkyl, C<sub>1-4</sub> haloalkoxy, CN, NO<sub>2</sub>, aryl, heteroaryl, amino or dialkylamino, C<sub>1-6</sub> alkoxycarbonyl, or two adjacent substituents can cyclise to form a 5, 6 or 7 membered carbocyclic or heterocyclic ring), heteroaryl(C<sub>2-8</sub>)alkenyl (wherein the heteroaryl group is optionally substituted halogen, C<sub>1-4</sub> alkyl, C<sub>1-4</sub> alkoxy, C<sub>1-4</sub> haloalkyl, C<sub>1-4</sub> haloalkoxy, CN, NO<sub>2</sub>, aryl, heteroaryl, amino or dialkylamino, C<sub>1-6</sub> alkoxycarbonyl, or two adjacent substituents can cyclise to form a 5, 6 or 7 membered carbocyclic or heterocyclic ring), C<sub>2-6</sub> alkynyl, phenyl(C<sub>2-6</sub>)alkynyl (wherein the phenyl group is optionally substituted by halogen,  $C_{1-4}$  alkyl,  $C_{1-4}$  alkoxy,  $C_{1-4}$  haloalkyl,  $C_{1-4}$  haloalkoxy, CN, NO<sub>2</sub>, aryl, heteroaryl, amino or dialkylamino), C<sub>3-7</sub> cycloalkyl, C<sub>1-6</sub> alkoxycarbonyl, C<sub>1-6</sub> alkylcarbonyl,  $C_{1.6}$  haloalkylcarbonyl or aryl( $C_{2.6}$ )alkenylcarbonyl (wherein the aryl group may be optionally substituted halogen,  $C_{1-4}$  alkyl,  $C_{1-4}$  alkoxy,  $C_{1-4}$  haloalkyl,  $C_{1-4}$  haloalkoxy,

CN, NO<sub>2</sub>, aryl, heteroaryl, amino or dialkylamino), or  $-C(R^{51})(R^{52})$ -[CR<sup>53</sup>=CR <sup>54</sup>]z-R<sup>55</sup> where z is 1 or 2, R<sup>51</sup> and R<sup>52</sup> are each independently H, halo or C<sub>1-2</sub> alkyl, R<sup>53</sup> and R<sup>54</sup> are each independently H, halogen, C<sub>1-4</sub> alkyl or C<sub>1-4</sub> haloalkyl and R<sup>55</sup> is optionally substituted aryl or optionally substituted heteroaryl.

- 8. (Previously Presented) A method according to claim 1 wherein each Ra is hydrogen.
- 9. (Previously Presented) A method according to claim 1 wherein p is 1 or 2 and q is 2 or 3.
- 10. (Currently Amended) A compound of formula I'

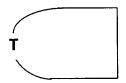
$$(CRa_2)p$$
 $(CRa_2)q$ 
 $R^3$ 
 $(R_4)n$ 
 $(I')$ 

wherein Y is C=O, C=S;

R¹ is hydrogen, optionally substituted alkyl, optionally substituted alkoxycarbonyl, optionally substituted alkylcarbonyl, aminocarbonyl, optionally substituted alkylaminocarbonyl, optionally substituted aryl, optionally substituted heteroaryl, optionally substituted alkoxy, optionally substituted aryloxy, optionally substituted heteroaryloxy, optionally substituted heterocyclyloxy, cyano, optionally substituted alkenyl, optionally substituted alkynyl, optionally substituted cycloalkyl, optionally substituted cycloalkenyl, formyl, optionally substituted heterocyclyl, optionally substituted alkylthio, NO or NR¹³R¹⁴ where R¹³ and R¹⁴ are independently hydrogen, COR¹⁵, optionally substituted alkyl, optionally substituted heterocyclyl or R¹³ and R¹⁴ together with the N atom to which they are attached form a group -N=C(R¹⁶)-NR¹³R¹⁵; R¹⁵ is H, optionally substituted alkyl, optionally substituted heteroaryl, optionally substituted heteroaryl, optionally substituted heteroaryl, optionally substituted heteroaryl, optionally substituted heteroaryl,

optionally substituted heteroaryloxy or  $NR^{19}R^{20}$ ;  $R^{16}$ ,  $R^{17}$  and  $R^{18}$  are each independently H or lower alkyl;  $R^{19}$  and  $R^{20}$  are independently optionally substituted alkyl, optionally substituted aryl or optionally substituted heteroaryl;

R<sup>2</sup> and R<sup>3</sup> are independently hydrogen, halogen, cyano, optionally substituted alkyl, optionally substituted alkoxy or optionally substituted aryl; the ring



is a [[5 or ]]6 membered heteroaromatic ring, , wherein T1 represents N, and each of T2, T3, and T4 represent C;

each  $R^4$  is independently halogen, nitro, cyano, optionally substituted  $C_{1-8}$  alkyl, optionally substituted  $C_{2-6}$  alkenyl, optionally substituted  $C_{2-6}$  alkynyl, optionally substituted alkoxycarbonyl, optionally substituted alkylaminocarbonyl, optionally substituted alkylaminocarbonyl, optionally substituted  $C_{3-7}$  cycloalkyl, optionally substituted aryl, optionally substituted heteroaryl, optionally substituted heterocyclyl, optionally substituted alkoxy, optionally substituted aryloxy, optionally substituted heteroaryloxy, optionally substituted alkylthio or  $R^{21}R^{22}N$  where  $R^{21}$  and  $R^{22}$  are, independently, hydrogen,  $C_{1-8}$  alkyl,  $C_{3-7}$  cycloalkyl,  $C_{3-6}$  alkenyl,  $C_{3-6}$  alkynyl,  $C_{3-7}$  cycloalkyl( $C_{1-4}$ )alkyl,  $C_{2-6}$  haloalkyl,  $C_{1-6}$  alkoxy( $C_{1-6}$ )alkyl,  $C_{1-6}$  alkoxycarbonyl or  $R^{21}$  and  $R^{22}$  together with the N atom to which they are attached form a five, six or seven-membered heterocyclic ring which may contain one or two further heteroatoms selected from O, N or S and which may be optionally substituted by one or two  $C_{1-6}$  alkyl groups, or 2 adjacent groups  $R^4$  together with the carbon atoms to which they are attached form a 4, 5, 6,or 7 membered carbocyclic or heterocyclic ring which may be optionally substituted by halogen; n is 0, 1, 2 or 3;

each Ra is independently hydrogen, halogen, hydroxy, cyano, optionally substituted  $C_{1-8}$  alkyl, optionally substituted  $C_{2-6}$  alkenyl, optionally substituted  $C_{2-6}$  alkynyl, optionally substituted alkylcarbonyl, optionally substituted

alkylaminocarbonyl, optionally substituted dialkylaminocarbonyl, optionally substituted C<sub>3-7</sub> cycloalkyl, optionally substituted aryl, optionally substituted heteroaryl, optionally substituted heterocyclyl, optionally substituted alkoxy, optionally substituted aryloxy, optionally substituted heteroaryloxy, optionally substituted alkylthio, optionally substituted arylthio or R<sup>23</sup>R<sup>24</sup>N where R<sup>23</sup> and R<sup>24</sup> are, independently, hydrogen, C<sub>1-8</sub> alkyl, C<sub>3-7</sub> cycloalkyl, C<sub>3-6</sub> alkenyl, C<sub>3-6</sub> alkynyl, C<sub>3-7</sub> cycloalkyl(C<sub>1-4</sub>)alkyl, C<sub>2-6</sub> haloalkyl, C<sub>1-6</sub> alkoxy(C<sub>1-6</sub>)alkyl, C<sub>1-6</sub> alkoxycarbonyl or R<sup>23</sup> and R<sup>24</sup> together with the N atom to which they are attached form a five, six or seven-membered heterocyclic ring which may contain one or two further heteroatoms selected from O, N or S and which may be optionally substituted by one or two C<sub>1-6</sub> alkyl groups, or two Ra groups attached to the same carbon atom are =O or two Ra groups attached to adjacent carbon atoms form a bond, or two Ra groups together with the carbon atom to which they are attached form a three- to seven-membered ring, that may be saturated or unsaturated, and that may contain one or two hetero atoms selected from the group consisting of N, O and S, and which may be optionally substituted by one or two C<sub>1-6</sub> alkyl groups; or two Ra groups together form a group -CH<sub>2</sub>-, -CH=CH- or -CH<sub>2</sub>CH<sub>2</sub>; p is 0, 1, 2, 3, 4, 5 or 6; q is 0, 1, 2, 3, 4, 5 or 6 provided that p+q is 1, 2, 3, 4, 5 or 6; R<sup>8</sup> is optionally substituted alkyl, optionally substituted alkenyl, optionally substituted alkynyl, optionally substituted cycloalkyl, optionally substituted aryl, optionally substituted alkoxy, optionally substituted aryloxy, optionally substituted alkoxycarbonyl, optionally substituted alkylcarbonyl or optionally substituted alkenylcarbonyl; or salts or N-oxides thereof.

## 11. (Currently Amended) A compound of formula II

$$(CRa_2)p$$
 $(CRa_2)q$ 
 $R^2$ 
 $(R_4)n$ 
 $(II)$ 

## wherein Y is C=O, C=S;

R<sup>1</sup> is hydrogen, optionally substituted alkyl, optionally substituted alkoxycarbonyl, optionally substituted alkylcarbonyl, aminocarbonyl, optionally substituted alkylcarbonyl,

optionally substituted dialkylaminocarbonyl, optionally substituted aryl, optionally substituted heteroaryl, optionally substituted alkoxy, optionally substituted aryloxy, optionally substituted heteroaryloxy, optionally substituted heterocyclyloxy, cyano, optionally substituted alkenyl, optionally substituted alkynyl, optionally substituted cycloalkyl, optionally substituted cycloalkyl, optionally substituted alkylthio, NO or NR<sup>13</sup>R<sup>14</sup> where R<sup>13</sup> and R<sup>14</sup> are independently hydrogen, COR<sup>15</sup>, optionally substituted alkyl, optionally substituted aryl, optionally substituted heteroaryl, optionally substituted heterocyclyl or R<sup>13</sup> and R<sup>14</sup> together with the N atom to which they are attached form a group —N=C(R<sup>16</sup>)-NR<sup>17</sup>R<sup>18</sup>; R<sup>15</sup> is H, optionally substituted alkyl, optionally substituted alkoxy, optionally substituted aryl, optionally substituted aryloxy optionally substituted heteroaryl, optionally substituted heteroaryl, optionally substituted heteroaryloxy or NR<sup>19</sup>R<sup>20</sup>; R<sup>16</sup>, R<sup>17</sup> and R<sup>18</sup> are each independently H or lower alkyl; R<sup>19</sup> and R<sup>20</sup> are independently optionally substituted alkyl, optionally substituted aryl or optionally substituted heteroaryl;

R<sup>2</sup> and R<sup>3</sup> are independently hydrogen, halogen, cyano, optionally substituted alkyl, optionally substituted alkoxy or optionally substituted aryl; the ring



is a 6 membered heteroaromatic ring, 4 , wherein T1 represents N, and each of T2, T3, and T4 represent C;

each  $R^4$  is independently halogen, nitro, cyano, optionally substituted  $C_{1-8}$  alkyl, optionally substituted  $C_{2-6}$  alkenyl, optionally substituted alkylcarbonyl, optionally substituted alkylcarbonyl, optionally substituted alkylaminocarbonyl, optionally substituted  $C_{3-7}$  cycloalkyl, optionally substituted aryl, optionally substituted heteroaryl, optionally substituted heteroaryl, optionally substituted heteroaryl, optionally substituted aryloxy, optionally substituted aryloxy, optionally substituted heteroaryloxy, optionally substituted alkylthio or  $R^{21}R^{22}N$  where  $R^{21}$  and  $R^{22}$  are, independently, hydrogen,  $C_{1-8}$  alkyl,  $C_{3-7}$  cycloalkyl,  $C_{3-6}$  alkenyl,  $C_{3-6}$  alkynyl,  $C_{3-7}$ 

cycloalkyl(C<sub>1-4</sub>)alkyl, C<sub>2-6</sub> haloalkyl, C<sub>1-6</sub> alkoxy(C<sub>1-6</sub>)alkyl, C<sub>1-6</sub> alkoxycarbonyl or R<sup>21</sup> and R<sup>22</sup> together with the N atom to which they are attached form a five, six or seven-membered heterocyclic ring which may contain one or two further heteroatoms selected from O, N or S and which may be optionally substituted by one or two C<sub>1-6</sub> alkyl groups, or 2 adjacent groups R<sup>4</sup> together with the carbon atoms to which they are attached form a 4, 5, 6,or 7 membered carbocyclic or heterocyclic ring which may be optionally substituted by halogen; wherein R<sup>8</sup> is H or *tert*-butoxycarbonyl;[[ and]]

n is 0, 1, 2 or 3;[[, ]]

p is 0, 1, 2, 3, 4, 5 or 6;[[, ]]

q is 0, 1, 2, 3, 4, 5 or 6 provided that p+q is 1, 2, 3, 4, 5 or 6;  $R^{1}$ ,  $R^{2}$ ,  $R^{3}$ ,  $R^{4}$ and Ra is independently hydrogen, halogen, hydroxy, cyano, optionally substituted C<sub>1-8</sub> alkyl, optionally substituted C<sub>2.6</sub> alkenyl, optionally substituted C<sub>2.6</sub> alkynyl, optionally substituted alkoxycarbonyl, optionally substituted alkylcarbonyl, optionally substituted alkylaminocarbonyl, optionally substituted dialkylaminocarbonyl, optionally substituted C<sub>3-7</sub> cycloalkyl, optionally substituted aryl, optionally substituted heteroaryl, optionally substituted heterocyclyl, optionally substituted alkoxy, optionally substituted aryloxy, optionally substituted heteroaryloxy, optionally substituted alkylthio, optionally substituted arylthio or R<sup>23</sup>R<sup>24</sup>N where R<sup>23</sup> and R<sup>24</sup> are, independently, hydrogen, C<sub>1-8</sub> alkyl, C<sub>3-7</sub> cycloalkyl, C<sub>3-6</sub> alkenyl, C<sub>3-6</sub> alkynyl, C<sub>3-7</sub> cycloalkyl(C<sub>1-4</sub>)alkyl, C<sub>2-6</sub> haloalkyl, C<sub>1-6</sub> alkoxy(C<sub>1-6</sub>)alkyl, C<sub>1-6</sub> alkoxycarbonyl or R<sup>23</sup> and R<sup>24</sup> together with the N atom to which they are attached form a five, six or seven-membered heterocyclic ring which may contain one or two further heteroatoms selected from O, N or S and which may be optionally substituted by one or two C<sub>1.6</sub> alkyl groups, or two Ra groups attached to the same carbon atom are =O or two Ra groups attached to adjacent carbon atoms form a bond, or two Ra groups together with the carbon atom to which they are attached form a three- to seven-membered ring, that may be saturated or unsaturated, and that may contain one or two hetero atoms selected from the group consisting of N, O and S, and which may be optionally substituted by one or two C<sub>1-6</sub> alkyl groups; or two Ra groups together form a group -CH<sub>2</sub>-, -CH=CH- or -CH<sub>2</sub>CH<sub>2</sub> are as defined in claim 10.

12. (Currently Amended) An insecticidal, acaricidal and nematicidal composition comprising an insecticidally, acaricidally or nematicidally effective amount of a compound of formula l' as defined in claim 10.